Claims

1. A wireless user input device for communicating a user input to a computer, comprising:

a) a user input detecting element that detects a user input;

b) a kinetic energy converting device that converts kinetic energy supplied to the user input device by the user to electrical energy;

c) a transmitter in communication with the user input detecting element that uses said electrical energy to communicate a user input detected by the user input detecting element to the computer.

2. The wireless input device of claim 1 further comprising a battery electrically connected to the kinetic energy converting device and the transmitter, wherein the battery powers the transmitter and is charged by the kinetic energy converting device.

3. The wireless input device of claim 2 further comprising a charging circuit electrically connected to the kinetic energy converting device and the battery that rectifies and regulates voltage from the kinetic energy converting device to charge the battery.

4. The wireless input device of claim 1 wherein the kinetic energy converting device is a piezoelectric device.

5. The wireless input device of claim 4 wherein the kinetic energy converting device is a piezoelectric transformer.

6. The wireless input device of claim 4 wherein the kinetic energy converting device is a piezoelectric actuator.

7. The wireless input device of claim 1 wherein the kinetic energy converting device is a generator.

8. The wireless input device of claim 1 wherein the user input detecting element comprises a plurality of keys of a wireless keyboard.

9. The wireless input device of claim 8 wherein pressing of a keyboard key causes the transmitter to communicate a signal to the computer that corresponds to the key and wherein kinetic energy supplied by pressing the key is converted to electrical energy by the kinetic energy converting device.

10. The wireless input device of claim 8 wherein the kinetic energy converting device is a piezoelectric device and pressing of a keyboard key applies kinetic energy to the piezoelectric device.

11. The wireless input device of claim 10 wherein pressing of the keyboard key flexes the piezoelectric to transfer kinetic energy of the keyboard key to the piezoelectric device.

12. The wireless input device of claim 1 wherein the user input detecting element comprises keys of a wireless keyboard and the kinetic energy converting device is a piezoelectric device, and wherein movement of multiple keyboard keys applies kinetic energy to a single piezoelectric device.

13. The wireless input device of claim 1 wherein the user input detecting element comprises keys of a wireless keyboard and the kinetic energy converting device is a piezoelectric device, and wherein movement of one keyboard key applies kinetic energy to a plurality of piezoelectric devices.

14. The wireless input device of claim 1 wherein the user input detecting element is a motion sensing element of a computer mouse and the kinetic energy converting device comprises a generator, and wherein movement of the motion sensing element transfers kinetic energy to the generator.

15. The wireless input device of claim 14 wherein the motion sensing element is a mouse ball.

16. A method of communicating a user input from a wireless input device to a computer, comprising:

a) converting kinetic energy of the user input device to electrical energy;

b) providing said electrical energy to a transmitter; and

c) communicating a user input provided to the user input device to the computer.

17. The method of claim 16 further comprising storing said electrical energy and using stored electrical energy to communicate the user input to the computer.

18. The method of claim 16 wherein the kinetic energy is converted to electrical energy with a piezoelectric device.

19. A kinetic energy utilizing computer system, comprising:

a) a display;

b) a memory in which machine instructions are stored;

c) a system battery;

d) a processor that is coupled to the display, to the memory and to the system battery, the processor executing the machine instructions to carry out a plurality of functions;

e) a user input device in communication with the processor, the user input device, includes:

i) a user input detecting element that detects a user input;

ii) a kinetic energy converting device that converts kinetic energy supplied to the user input device by the user to electrical energy that is used to charge the system battery.

20. The computer system of claim 19 wherein the kinetic energy converting device is a piezoelectric device.

21. The computer system of claim 19 wherein the kinetic energy converting device is a generator.

22. The computer system of claim 19 wherein the user input device is a notebook keyboard.

23. The computer system of claim 22 wherein kinetic energy supplied by pressing the key is converted to electrical energy by the kinetic energy converting device.

24. The computer system of claim 22 wherein the kinetic energy converting device is a piezoelectric device and pressing of a keyboard key applies kinetic energy to the piezoelectric device.

25. The computer system of claim 19 wherein the user input device is a computer mouse.

26. A wireless keyboard for communicating a user input to a computer, comprising:

a) a plurality of keys for entering a user input;

b) a kinetic energy converting device that converts kinetic energy supplied to one or more of the keys by the user to electrical energy;

c) a transmitter provided with signals that are indicative of movement of the keys that uses said electrical energy to communicate said signals to the computer.

27. The wireless keyboard of claim 26 further comprising a battery electrically connected to the kinetic energy converting device and the transmitter, wherein the battery powers the transmitter and is charged by the kinetic energy converting device.

28. The wireless keyboard of claim 26 wherein the kinetic energy converting device is a piezoelectric device.

29. The wireless keyboard of claim 28 wherein the kinetic energy converting device is a piezoelectric transformer.

30. The wireless keyboard of claim 28 wherein the kinetic energy converting device is a piezoelectric actuator.

31. The wireless keyboard of claim 26 wherein the kinetic energy converting device is a generator.

32. The wireless keyboard of claim 26 wherein the kinetic energy converting device is a piezoelectric device and pressing of a keyboard key applies kinetic energy to the piezoelectric device.

33. The wireless keyboard of claim 32 wherein pressing of the keyboard key flexes the piezoelectric device to transfer kinetic energy of the keyboard key to the piezoelectric device.

34. The wireless keyboard of claim 26 wherein the kinetic energy converting device is a piezoelectric device, and wherein movement of multiple keyboard keys applies kinetic energy to a single piezoelectric device.

35. The wireless input device of claim 27 wherein the kinetic energy converting device is a piezoelectric device, and wherein movement of one keyboard key applies kinetic energy to multiple piezoelectric devices.